Maintenance

Excavated Ponds – Don'ts

- Trees and shrubs are not permitted over or within 4 feet of the principal spillway (barrel pipe)
  Reason: Tree roots may cause pipe misalignment
- Trees and shrubs are not permitted within the emergency spillway
  Reason: Dense growth can obstruct flows and cause the water level to overtop the dam
- Trees and shrubs are not permitted within a 25 foot radius around the inlet structure
  Reason: Roots can shift or crack the inlet structure

Excavated Ponds – Do's

- Mow the ground over or within 4 feet of the principal spillway (barrel pipe)
  Reason: This will prevent roots from penetrating the core trench around the pipe
- Clear the barrel outfall (riprap apron)of dense vegetation.
  Reason: Removing obstructions will help prevent excessive sediment accumulation within the pipe
- Clear the storm drain outfalls of dense vegetation.
  Reason: Removing obstructions will help prevent excessive sediment accumulation within the storm drain

Embankment Ponds – Don'ts

- Trees and shrubs are not permitted on the top, upstream or downstream dam slopes
  Reason: Tree roots may cause pathways through the clay core of the dam; they may also fall and remove a portion of the embankment
- Trees and shrubs are not permitted within the emergency spillway
  Reason: Dense growth can obstruct flows and cause the water level to overtop the dam
- Trees and shrubs are not permitted within a 25 foot radius around the inlet structure or within 15 feet of the toe
  Reason: Roots can shift or crack the inlet structure

Embankment Ponds – Do's

- Mow the top, upstream and downstream dam slopes when the grass height exceeds 12" in height
  Reason: This will prevent the grass from falling over and killing new growth
- Clear the barrel outfall (riprap apron)of dense vegetation.
  Reason: Removing obstructions will help prevent excessive sediment accumulation within the pipe
- Clear the storm drain outfalls of dense vegetation.
  Reason: Removing obstructions will help prevent excessive sediment accumulation within the storm drain

Miscellaneous Maintenance for All Ponds

- Corrosion on metal trash racks and risers:
  Remove corrosion and coat with bituminous material
- Overgrown or clogged dewatering stone:
  Remove excess vegetation from stone. If necessary, rake the stone to dislodge sediments. If the stone is severely clogged, the stone will require replacement.
- Seepage through riser walls
  If seepage is occurring through exposed aggregates, then pressure grouting may be needed. Parget over the surface with a non-shrink grout or epoxy to cover exposed rebar or small seeps.
- Sloughing,slumping or sliding of slopes:
  May result because of poor stabilization. Apply lime, seed and mulch or curlex to regraded areas.
  Repair may need a geotechnical assessment.
- Depressions:
  If the depression occurs over the barrel pipe, it may indicate soil loss through a joint or from pipe deterioration. Contact the County for further instruction
- Animal Burrows:
  Mudpack the burrow with a slurry consisting of 90% earth and 10% cement

Maintenance for Wet Retention Ponds

Wet Ponds: Remove tall vegetation growing along the water's edge on the upstream dam slope
Reason: This will discourage muskrats from burrowing into the dam; minimizes animal burrowing

Ponds with Forebays

- Remove sediment from the forebay when 50% of its capacity has been lost
- Remove sediment if it is higher than the invert of the storm drain.

Sand Filters

- If the facility does not drain and wetland plants are evident, then the facility has failed. Remove top layer of sand/mulch/soil; filter cloth may need to be replaced.
- If the facility does not drain in 72 hours then the filter cloth may be clogged. The cloth will need to be replaced.

Bioretention Facilities

- Remove sediment, debris, and weeds from the bioretention
- Apply mulch as necessary
- Do not obstruct flow into the inlet boxes

Note: The lifespan for a concrete principal spillway is approximately 75+ years.
The lifespan for a metal principal spillway ranges between 20 – 25 years.
2011: The cost of dredging (sediment removal) is approximately $30cy. This does include taking the material offsite.